BDCP RDEIR/SDEIS Review Document Comment Form

Document: ***Administrative Draft—REIR/SEIS***

Comment Source: USACE
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No.	Page	Line #	Comment	ICF Response
Section 4				
1			USACE performed a cursory review within the one week timeframe allotted for the RDEIS. The USACE comments are not comprehensive. Please ensure all comments that are provided are carried throughout the document to ensure consistency. These comments do not include review of the recently provided USACE specific appendix.	
2			Hydraulic impacts have not been adequately assessed for the alternatives within the EIS. Conclusions regarding impacts to surface water, erosion, scour, sedimentation have been provided without adequate modeling. Please refer to the example EIS that has been provided to ensure the appropriate level of analysis is conducted for the EIS. Hydraulic modeling results should be included within the document with a hydraulic analysis report as an appendix. The results should disclose impacts related to a full range of flood events (1/10, 1/100, 1/200, SB5, 1/500 and design event modeled to determine impacts) for all intakes, head of Old River barrier, any mitigation/environmental commitment sites located on a Federal levee or channel and any other work that is located on a Federal levee or channel. The analysis needs to include impacts both during and after construction. It should also include a discussion on transfer of risk. This would include the impacts associated with strengthening levees on one side of the river while the opposite side is not being improved. Changes in velocity, water surface elevation, flowage distribution, scour, sediment transport and any up/downstream impacts should be analyzed. The hydraulic model should include the entire extent of impacts. Any localized levee raises should be included. A supplemental, tiered or new EIS will be required for 408.	
3			Further information regarding environmental commitments that will impact Federally authorized levees and channels is critical. The document	

			discusses significant levee alterations that may occur as part of environmental commitments. Hydraulic modeling over the full range of flood events is necessary. The hydraulic model should include the entire extent of impacts. Hydraulic and geotechnical mitigation measures need to be included in more detail.	
4			Yolo Bypass improvements are assumed as part of the "no action" alternative for alternatives 4A, 2D and 5A because they are "required by the existing BiOps". However, the Yolo Bypass improvements require authorization from USACE under CWA 404 and 33 USC 408 and an EIS is currently in process. In light of the need for discretionary USACE approvals which have yet to be granted, you need to ensure there isn't language in the "no action" that would seem to be pre-decisional for USACE. If the language remains as written, USACE has concerns about our ability to later adopt the EIS.	
5			Mitigation Measure SW-4 is relied upon heavily for surface water impacts however, it is not detailed enough for all surface water impacts. A complete review and update of mitigation measures for surface water impacts will need to be provided in the future environmental documentation that will be done for 408 permission.	
6			Intake Construction General - No mention is made of monitoring the project levees during (or after) intake construction to make sure the levees are not damaged or any damage is repaired after construction. Construction activities most likely to impact the project levees are pile driving (vibration), adjacent excavation, and trenchless construction of intake gravity collector pipelines (if used). This is partly mitigated by the widening of the levees at the intake structures.	
7			Borrow Sites - The document discloses that additional NEPA may be necessary to cover borrow areas. Note that if borrow areas for the levee improvements and intakes are not disclosed in this document, supplemental NEPA will be required for the 408 permits that are impacted by those borrow sources.	
8	4.1-46	27	The physical modeling relies upon the Yolo Bypass improvements however, these improvements will require USACE permitting. The project is largely undefined at this time and it would be too early and pre-decisional to rely on. Provide better information regarding the sensitivity analysis done to let readers know if these improvements are not done, what would the physical modeling results be.	

9	4.2-2	15	The added sentence states that Yolo bypass improvements were not included in the no action which contradicts the description of the no action.	
10	4.3.2-7	16	"Construction of cofferdams could impede river flows, cause hydraulic effects, and increase water surface elevations upstream." Impacts associated with cofferdams should be a separate impact analysis. The cofferdam impacts are lost within SW-4. The mitigation measure SW-4 discusses how impacts associated with sedimentation will be addressed but does not discuss how impacts due to the cofferdams will be addressed. Recommend separating out the cofferdam impacts to its own impact analysis and mitigation measures.	
11	4.3.2-8	32	It is unclear how USACE permitting will be associated with dewatering facilities that would be for runoff exceeding the capacity of existing or planned stormwater drainage systems. Recommend deleting USACE permitting from the CEQA conclusion.	
12	4.3.2-9	3	Impact SW-7 appears to be the place for a more robust discussion related to hydraulic impacts from the project (during construction). The information contained within this section is not detailed enough for USACE purposes. Hydraulic modeling over the full range of flood events is necessary. The hydraulic model should include the entire extent of impacts. In addition, changes in velocity, water surface elevation, flowage distribution, scour, sediment transport and any up/downstream impacts should be disclosed.	
13	4.3.2-9	3	SW-7 appears to be related to impacts during construction. A separate impact analysis should be included for impacts during operations. Hydraulic modeling over the full range of flood events is necessary. The hydraulic model should include the entire extent of impacts. In addition, changes in velocity, water surface elevation, flowage distribution, scour, sediment transport and any up/downstream impacts should be disclosed.	
14	4.3.2-9	29	SW-8 should include more than simply wind fetch lengths. The environmental commitments are not yet well defined. They could have impacts to water surface elevations, sedimentation, velocity, scour, etc. The impact analysis and associated mitigation measures should address all potential impacts that could expose people or structures to a significant risk of loss, injury or death involving flooding.	
15	4.3.2-10	18	Impact SW-9: Alternative 4A would include structures within the 100-year flood hazard area.	

			These structures MAY result in impeded or redirected flood flows or conditions. Additional hydraulic modeling is required to determine the extent of those potential impacts. While USACE permitting would require compensating for any significant hydraulic impacts, the project may have impacts.	
16	4.3.2-10	33	The NEPA effects aren't associated with impeded flood flows in the 100-year flood hazard area. Revise NEPA effects.	
17	4.3.2-10	35	Mitigation Measure SW-4 would not adequately address all potential impacts.	
18	4.3.2-10	37	Additional hydraulic modeling is required to determine the extent of those potential impacts. While USACE permitting would require compensating for any significant hydraulic impacts, the project may have impacts.	
19	4.3.2-11	5	Mitigation Measure SW-4 would not adequately address all potential impacts.	
20	4.3.5-6	7	Delete "and would have to pass quality assurance review by the Major Subordinate Command prior to being forwarded to USACE headquarters for final approval by the Chief of Engineers."	
21	4.3.5-10	4	Delete "and would have to pass quality assurance review by the Major Subordinate Command prior to being forwarded to USACE headquarters for final approval by the Chief of Engineers."	
22			Recommend deleting "As discussed in Impact SW-2 in Chapter 6, Surface Water operation of the water conveyance features under Alternative 4A would not result in an increase in potential risk for flood management compared to existing conditions." Modeling has not been conducted to determine if there is a potential increase in flood risk.	
23	4.3.5-18	21	More details related to the Environmental Commitments impacting Federally authorized levees and channels is needed. Additional levee strengthening may be required in addition to any hydraulic mitigation that would be necessary for significant hydraulic impacts.	
24	4.3.2 6-2	32	This paragraph is confusing. It seems like this paragraph should be written more in terms of the project itself not inducing growth in a floodplain. Since the levee improvements will be localized to the intake facilities, the remainder of the area would not change. The whole paragraph seems out of place for the indirect growth inducement.	
25	5-48	1	The cumulative effects analysis for surface water is lacking in detail. The cumulative effects of this project in conjunction with other projects up and downstream should be addressed. Projects missing from table 5.2.2.2-1 include:	

			River Islands 408 Southport 408 Common Features GRR West Sacramento GRR RD 17 408	
26	9-14	4	What is the extent of riprap placement? What analysis was done to verify the extent of riprap required? How much clearing of vegetation will be required for riprap placement? This information is critical for determining impacts to species.	
27	19		The chapter should add information regarding traffic induced impacts on roadways located upon levees. A qualitative discussion of the potential impacts and measures that will be taken to monitor and/or avoid impacts should be included.	
28	19-85	30	The extent the intake cofferdams would extend in the river conflicts with Chapter 9. Be sure to make consistent and reflected correctly in the hydraulic model. This section states 120 feet while Chapter 9, page 9-12 states the cofferdam would extend approximately 10-35 feet from the footprint of the intake.	
29	19-85	40	This statement is meant to discuss the impact to navigation but the hydraulic impacts will also need to be analyzed for these facilities. No adverse impact should be the target with potential for hydraulic mitigation necessary.	